



Digital Marketing Strategy for Competency-Based Training and Certification Institutions: A Case Study of Pustama Indonesia

Sunarni¹, Aldi Friyatna Dira², Dede Siti Syamsiah³, Haris Karyadi⁴

^{1,2,3,4}Sekolah Tinggi Ilmu Ekonomi GICI

Email :^{1*} wongsunmandiri@gmail.com, ² aldi_dira88@stiegoci.ac.id, ³ dedesyamsiah91@gmail.com,

⁴ hariskaryadi@gmail.com

4

Article Info :

Received:

25/01/2026

Revised:

29/01/2026

Accepted:

07/02/2026

ABSTRACT

The increasingly competitive work environment demands human resources (HR) with measurable competencies that are relevant to industry needs and nationally recognized. This condition has prompted the growing role of competency-based training and certification institutions as strategic partners in HR development. However, training institutions face challenges in marketing educational services that are intangible, high-risk, and heavily dependent on prospective participants' trust. This study aims to analyze the digital marketing strategy implemented by PUSTAMA INDONESIA as a competency-based training institution and testing center accredited by the National Professional Certification Board (BNSP). The research employs a qualitative approach using a case study method. Data collection was conducted through observation of the institution's digital media, analysis of training and certification program documentation, and limited interviews with institutional managers. The findings indicate that digital marketing utilization through the official website, social media, and instant messaging applications contributes to increasing institutional visibility, strengthening professional image and credibility, and encouraging participant interest and decisions to join training and certification programs. These findings confirm that integrated digital marketing strategies play an important role in supporting the sustainability of training institutions and the development of competent and nationally certified human resources.

Keywords: digital marketing, human resource management, training and certification, competency, BNSP



©2022 Authors.. This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.
(<https://creativecommons.org/licenses/by-nc/4.0/>)

1. Introduction

1.1 Background

Human resource (HR) development is a strategic factor in enhancing the competitiveness of individuals, organizations, and nations in the knowledge-based economy era (Becker, 1964; Schultz, 1961). Digital transformation, technological changes, and the dynamics of industry needs demand that the workforce possess not only theoretical knowledge but also standardized and demonstrable practical competencies (World Economic Forum, 2020; OECD, 2019). Formal education often fails to fully address these needs, making competency-based training and professional certification increasingly relevant alternatives (Billett, 2001; Cedefop, 2014).

The Indonesian government, through the National Professional Certification Board (BNSP), has established a national competency certification system to ensure HR quality and competitiveness both nationally and regionally (BNSP, 2021). This system requires the involvement of accredited training

and certification institutions capable of providing competency-based training aligned with Indonesian National Work Competency Standards (SKKNI) and conducting competency assessments objectively and professionally (Mulyasa, 2013; Sudira, 2016).

However, competency-based training and certification institutions face significant challenges in marketing their services. As intangible services, training and certification are difficult to evaluate before purchase, carry high perceived risk, and are heavily dependent on institutional reputation and credibility (Zeithaml, Parasuraman, & Berry, 1985; Kotler & Keller, 2016). In this context, digital marketing emerges as a strategic solution to reach target audiences, communicate program benefits, build trust, and facilitate decision-making processes for prospective participants (Chaffey & Ellis-Chadwick, 2019; Ryan & Jones, 2012).

Digital marketing encompasses all marketing activities that utilize digital technology and the internet to reach, communicate with, and build relationships with consumers (Kannan & Li, 2017; Leeflang, Verhoef, Dahlström, & Freundt, 2014). In the context of training services, digital marketing not only functions as a promotional tool but also as an educational medium and a means of shaping service quality perceptions (Hemsley-Brown & Oplatka, 2006; Constantinides & Zinck Stagno, 2011). Digital platforms such as websites, social media, search engines, and instant messaging applications provide opportunities for institutions to communicate interactively, disseminate information transparently, and build communities of prospective and former participants (Tuten & Solomon, 2017; Quesenberry, 2020).

Previous research has demonstrated the effectiveness of digital marketing in the education and training sectors. Studies show that the use of social media increases brand awareness and engagement with prospective students (Peruta & Shields, 2017; Rutter, Roper, & Lettice, 2016), official websites enhance institutional credibility and facilitate information access (Gregory & Salmon, 2013), and integrated digital marketing strategies improve conversion rates and student retention (Felix, Rauschnabel, & Hinsch, 2017; Hanover Research, 2014).

However, research specifically examining digital marketing strategies in competency-based training and certification institutions, particularly those accredited by BNSP, remains limited. Most studies focus on formal educational institutions such as universities and schools (Holliman & Rowley, 2014; Wibowo, Sudarno, & Harjanto, 2024), while training and certification institutions have unique characteristics requiring different marketing approaches. This gap underscores the need for in-depth research to understand how competency-based training institutions can effectively leverage digital marketing to support HR development and institutional sustainability.

PUSTAMA INDONESIA is one of the competency-based training institutions and BNSP-accredited testing centers actively utilizing digital marketing to promote training and certification programs. As an institution serving various segments including students, job seekers, company employees, and educational and governmental institutions, PUSTAMA INDONESIA faces diverse challenges in communicating program benefits and building trust among prospective participants.

This study aims to provide a comprehensive analysis of the digital marketing strategies implemented by PUSTAMA INDONESIA, including the digital platforms utilized, marketing content and messages, and the contribution of digital marketing to increasing participant interest and decisions. Through a qualitative case study approach, this research is expected to provide in-depth insights into digital marketing practices in competency-based training institutions and offer practical recommendations for other similar institutions.

1.2 Research Questions

Based on the background above, the research questions are:

1. What are the forms and implementation of digital marketing strategies applied by PUSTAMA INDONESIA?
2. What digital media are utilized in marketing competency-based training and certification programs?
3. How does digital marketing contribute to increasing participant interest and decisions to join BNSP training and certification programs?

1.3 Research Objectives

This study aims to:

1. Analyze the digital marketing strategies implemented by PUSTAMA INDONESIA
2. Identify the utilization of various digital media in supporting the marketing of training and certification services
3. Explain the contribution of digital marketing to increasing participant participation and HR development

1.4 Research Benefits

Theoretical Benefits

This research is expected to enrich studies in marketing management and human resource management, particularly regarding the marketing of competency-based education, training, and certification services (Kotler, 2000; Armstrong & Kotler, 2015). The findings can contribute to the development of service marketing theory in the educational context and the integration of digital marketing concepts with HR development (Hemsley-Brown & Oplatka, 2006).

Practical Benefits

The research results can serve as a reference for training and certification institution managers in designing and developing effective, adaptive, and sustainable digital marketing strategies (Chaffey & Ellis-Chadwick, 2019). Additionally, the findings can assist policymakers in developing policies that support the advancement of competency-based training and certification institutions as strategic partners in national HR development (BNSP, 2021).

2. Literature Review

2.1 Digital Marketing

Digital marketing is defined as marketing activities that utilize digital technology and the internet to reach, communicate with, and build relationships with consumers (Chaffey & Ellis-Chadwick, 2019; Kannan & Li, 2017). According to Ryan and Jones (2012), digital marketing encompasses all marketing efforts using electronic devices or the internet, including search engine optimization (SEO), social media marketing, email marketing, content marketing, and online advertising.

In the context of training services, digital marketing not only functions as a promotional tool but also as an educational medium and a means of shaping service quality perceptions (Hemsley-Brown & Oplatka, 2006; Constantinides & Zinck Stagno, 2011). Digital platforms enable institutions to communicate interactively with prospective participants, provide transparent and comprehensive information, and build communities that strengthen engagement and loyalty (Tuten & Solomon, 2017).

Previous research has demonstrated the effectiveness of digital marketing in increasing brand awareness, engagement, and conversion in the education sector. Peruta and Shields (2017) found that active social media use by educational institutions increases prospective student engagement and

strengthens institutional image. Rutter et al. (2016) showed that content marketing strategies through blogs and social media enhance brand awareness and trust in educational services. Felix et al. (2017) emphasized that integrated digital marketing strategies across multiple platforms produce better results than single-platform approaches.

2.2 Service Marketing and Human Resource Management

Service marketing has unique characteristics that differentiate it from product marketing, including intangibility, inseparability, variability, and perishability (Zeithaml et al., 1985; Lovelock & Wirtz, 2011). In the context of training services, these characteristics create specific challenges in marketing, particularly in communicating service value to prospective participants who cannot directly evaluate service quality before purchase (Kotler & Keller, 2016).

Bitner (1992) introduced the concept of servicescape, which emphasizes the importance of the physical and digital environment in shaping consumer perceptions of service quality. In the digital era, an institution's digital presence—including website, social media, and online platforms—functions as a virtual servicescape that influences prospective participants' perceptions and decisions (Gregory & Salmon, 2013; Holliman & Rowley, 2014).

In human resource management, individual decisions to participate in training and certification are influenced by perceptions of benefits, institutional reputation, and the relevance of offered competencies to work needs (Noe, 2017; Goldstein & Ford, 2002). Social cognitive theory (Bandura, 1986) explains that individual self-efficacy and outcome expectations significantly influence motivation to participate in training. In this context, digital marketing can strengthen positive perceptions by presenting success stories, participant testimonials, and concrete evidence of training benefits (Quesenberry, 2020).

2.3 BNSP Competency Certification

Competency certification is the process of providing recognition of an individual's work competency based on established standards (ILO, 2015; BNSP, 2021). In Indonesia, BNSP serves as the national authority responsible for the competency certification system, ensuring that certification processes are conducted objectively, fairly, and accountably (Mulyasa, 2013).

BNSP certification functions as an instrument for improving HR quality and competitiveness at both national and regional levels (Sudira, 2016). For individuals, competency certification provides formal recognition that can enhance employability, career opportunities, and income (Cedefop, 2014; OECD, 2019). For organizations, certified employees can improve productivity, work quality, and competitiveness (Becker, 1964; Schultz, 1961).

Accredited training and certification institutions by BNSP play a strategic role in the national competency certification ecosystem (BNSP, 2021). These institutions not only provide competency-based training but also conduct competency assessments through competent and certified assessors. Therefore, institutional credibility and reputation are crucial factors influencing individual decisions to choose training and certification programs (Kotler & Keller, 2016; Lovelock & Wirtz, 2011).

2.4 Theoretical Framework

This research is based on an integrated theoretical framework combining service marketing theory, digital marketing, and human resource management. The theoretical framework is illustrated in **Table 1**.

Table 1. Theoretical Framework of Digital Marketing in Training and Certification Institutions

Dimension	Key Concepts	Key References	Application in Context
Service Marketing	Intangibility, Inseparability, Variability, Perishability	Zeithaml et al. (1985); Lovelock & Wirtz (2011)	Training services are intangible and difficult to evaluate before purchase; digital marketing helps visualize benefits
Digital Marketing	SEO, Social Media, Content Marketing, Email Marketing	Chaffey & Ellis-Chadwick (2019); Ryan & Jones (2012)	Utilization of digital platforms to reach audiences and communicate program benefits
Virtual Servicescape	Website design, Social media presence, Online interaction	Bitner (1992); Gregory & Salmon (2013)	Digital environment shapes quality perceptions and trust
Social Cognitive Theory	Self-efficacy, Outcome expectations	Bandura (1986); Noe (2017)	Success stories and testimonials strengthen motivation to participate
Competency-Based Training	SKKNI standards, BNSP certification	BNSP (2021); Sudira (2016)	Standardized training relevant to industry needs
HR Development	Employability, Career development, Competitiveness	Becker (1964); Goldstein & Ford (2002)	Training and certification enhance work competencies and career opportunities

Source: Developed from literature review (2024)

Based on this theoretical framework, an effective digital marketing strategy enhances information access and trust among prospective participants. This trust encourages interest and decisions to join training and certification, ultimately contributing to HR quality improvement.

3. Research Methodology

3.1 Research Approach

This study employs a qualitative approach using a case study method to gain in-depth understanding of digital marketing strategies at a single institution (Yin, 2018; Creswell & Poth, 2018). The case study method is appropriate for exploring complex phenomena in real-world contexts and answering "how" and "why" questions (Stake, 1995; Merriam, 1998).

3.2 Research Object and Subject

The research object is PUSTAMA INDONESIA as a competency-based training institution and BNSP-accredited testing center. Research subjects include institutional managers responsible for marketing and program development, as well as training participants who can provide perspectives on the effectiveness of digital marketing.

3.3 Data Collection Techniques

Data collection was conducted through:

1. **Observation:** Systematic observation of the institution's website and social media (Facebook, Instagram, WhatsApp) to identify digital marketing strategies, content types, interaction frequency, and audience engagement (Patton, 2015).
2. **Documentation:** Analysis of training and certification program documents, promotional materials, marketing reports, and participant data to understand marketing strategies and program effectiveness (Bowen, 2009).
3. **Limited Interviews:** Semi-structured interviews with institutional managers to explore digital marketing strategies, challenges faced, and achieved outcomes (Kvale & Brinkmann, 2015).

3.4 Data Analysis Techniques

Data were analyzed using qualitative descriptive methods through the following stages (Miles, Huberman, & Saldaña, 2014):

1. **Data Reduction:** Selecting, focusing, and simplifying relevant data from observation, documentation, and interviews.
2. **Data Display:** Presenting data in organized form such as narratives, tables, and diagrams to facilitate understanding.
3. **Conclusion Drawing:** Drawing conclusions based on patterns and themes emerging from the data, verified through triangulation of sources and methods.

3.5 Data Validity

Data validity was ensured through:

1. **Triangulation:** Combining data from observation, documentation, and interviews to verify consistency of findings (Denzin, 1978).
2. **Member Checking:** Validating findings with research participants to ensure accuracy of interpretation (Lincoln & Guba, 1985).
3. **Thick Description:** Providing detailed descriptions of research context and processes to enable transferability assessment (Geertz, 1973).

4. Research Findings

4.1 PUSTAMA INDONESIA Profile and Programs

PUSTAMA INDONESIA is a competency-based training and certification institution conducting various HR development programs for students, job seekers, company employees, and educational and governmental institutions. As a BNSP-accredited testing center, PUSTAMA INDONESIA is authorized to conduct competency assessments in various schemes according to SKKNI standards.

The institution's training programs cover various competency fields, including:

1. **Office Administration:** Administrative competencies, document management, office correspondence
2. **Human Resource Management:** Recruitment, training, performance management
3. **Digital Marketing:** Social media marketing, SEO, content marketing
4. **Customer Service:** Communication skills, complaint handling, service excellence
5. **Occupational Health and Safety (K3):** Workplace safety, risk management, emergency response

Table 2 presents the distribution of training programs and participants in 2023.

Table 2. Distribution of Training Programs and Participants at PUSTAMA INDONESIA (2023)

Training Program	Number of Batches	Total Participants	Percentage (%)	Certification Rate (%)
Office Administration	12	240	28.5	87.5
Human Resource Management	8	160	19.0	91.3
Digital Marketing	10	200	23.8	85.0
Customer Service	9	180	21.4	88.9
Occupational Health and Safety	6	60	7.1	93.3
Total	45	840	100	88.8

Source: PUSTAMA INDONESIA Internal Data (2023)

The data shows that Office Administration and Digital Marketing are the most in-demand programs, with high certification rates across all programs, indicating the effectiveness of the training provided.

4.2 Technical Guidance and Pre-Assessment

In addition to training, PUSTAMA INDONESIA conducts technical guidance and pre-assessment for BNSP certification to improve participant readiness and competency test pass rates. Pre-assessment includes:

1. **Portfolio Preparation:** Guidance in preparing evidence of work performance
2. **Mock Assessment:** Simulation of competency assessment processes
3. **Technical Consultation:** Individual consultation on specific competencies
4. **Remedial Support:** Additional assistance for participants requiring improvement

These services are marketed through digital channels, emphasizing the added value provided to prospective participants.

4.3 Digital Marketing Strategy

PUSTAMA INDONESIA's digital marketing strategy encompasses several key elements:

4.3.1 Official Website as Information Hub

The institution's official website serves as the primary information hub providing comprehensive details about:

- Training and certification programs
- Schedule and registration procedures
- Trainer and assessor profiles
- Success stories and participant testimonials
- BNSP accreditation and institutional credentials
- Articles and resources on competency development

The website is designed to be user-friendly, mobile-responsive, and optimized for search engines (SEO) to increase organic visibility (Chaffey & Ellis-Chadwick, 2019).

4.3.2 Social Media for Promotion and Education

PUSTAMA INDONESIA actively utilizes social media platforms, particularly:

Instagram: Used for visual content, including infographics on program benefits, participant photos during training, motivational quotes, and short video testimonials. Content is designed to be engaging and shareable to increase reach (Tuten & Solomon, 2017).

Facebook: Serves as a platform for more detailed information, event announcements, live sessions with trainers, and community building among former participants. Facebook groups are used to facilitate interaction and knowledge sharing (Quesenberry, 2020).

YouTube: Hosts longer video content, including training previews, webinars, expert interviews, and documentary-style participant success stories.

Table 3 presents the social media engagement metrics for PUSTAMA INDONESIA in 2023.

Table 3. Social Media Engagement Metrics of PUSTAMA INDONESIA (2023)

Platform	Followers	Average Post Frequency	Average Engagement Rate (%)	Content Types
Instagram	15,200	5 posts/week	4.8	Infographics, photos, short videos,

Platform	Followers	Average Post Frequency	Average Engagement Rate (%)	Content Types
Facebook	12,500	4 posts/week	3.2	Articles, event updates, live sessions
YouTube	3,800	2 videos/month	6.5	Training previews, webinars, testimonials
WhatsApp Business	N/A	Daily responses	N/A	Personal inquiries, registration assistance

Source: PUSTAMA INDONESIA Social Media Analytics (2023)

The data indicates strong engagement across platforms, with YouTube showing the highest engagement rate, suggesting that video content is particularly effective in attracting and retaining audience attention.

4.3.3 Instant Messaging for Personal Communication

WhatsApp Business is used as the primary tool for personal communication with prospective participants. This platform enables:

- Quick responses to inquiries
- One-on-one consultation on suitable programs
- Registration assistance and administrative support
- Follow-up communication with former participants
- Broadcast messages for program announcements

The personal approach through instant messaging has proven effective in building trust and facilitating decision-making (Ryan & Jones, 2012; Wibowo et al., 2024).

4.3.4 Content Marketing and Educational Approach

PUSTAMA INDONESIA implements a content marketing strategy focused on education rather than hard selling. Content types include:

- **Blog Articles:** Topics on competency importance, career tips, industry trends
- **E-books/Guides:** Free downloadable resources on competency development
- **Webinars:** Free online sessions featuring industry experts
- **Infographics:** Visual data on employment statistics, competency benefits
- **Case Studies:** Success stories of certified participants

This educational approach positions the institution as a thought leader and trusted resource, strengthening credibility and attracting quality leads (Felix et al., 2017; Holliman & Rowley, 2014).

4.4 Participant Segmentation

Marketing segmentation is focused on four main groups, with digital messages and content tailored to each segment's characteristics:

1. Students and Fresh Graduates

- Message: "Enhance employability and career readiness"
- Content: Entry-level certification benefits, job market statistics, employer testimonials
- Channels: Instagram, YouTube, campus partnerships

2. Job Seekers

- Message: "Stand out with nationally recognized certification"
- Content: Resume enhancement, interview tips, certification success stories
- Channels: Facebook, LinkedIn, job search platforms

3. Company Employees

- Message: "Advance your career and professional development"
- Content: Career progression pathways, salary improvement statistics, corporate training packages
- Channels: LinkedIn, WhatsApp Business, corporate partnerships

4. Institutions (Educational/Government)

- Message: "Partner in developing competent workforce"
- Content: Institutional partnership benefits, batch training packages, customized programs
- Channels: Email marketing, direct presentations, official correspondence

Table 4 presents the participant distribution by segment in 2023.

Table 4. Participant Distribution by Segment at PUSTAMA INDONESIA (2023)

Segment	Number of Participants	Percentage (%)	Primary Acquisition Channel	Average Satisfaction Score (1-5)
Students & Fresh Graduates	336	40.0	Instagram, YouTube	4.3
Job Seekers	252	30.0	Facebook, Job Platforms	4.2
Company Employees	168	20.0	LinkedIn, WhatsApp	4.5
Institutions	84	10.0	Email, Direct Contact	4.6
Total	840	100	-	4.4

Source: PUSTAMA INDONESIA Participant Database (2023)

The data shows that students and fresh graduates constitute the largest segment, with Instagram and YouTube as the most effective acquisition channels for this demographic. High satisfaction scores across all segments indicate strong service quality and participant experience.

4.5 Digital Marketing Impact on Participation

Based on institutional data and limited interviews with managers, digital marketing has contributed significantly to:

1. **Increased Visibility:** Website and social media presence increase institutional discoverability through organic search and social sharing (Peruta & Shields, 2017).
2. **Enhanced Credibility:** Professional digital presence, participant testimonials, and educational content strengthen institutional reputation and trust (Rutter et al., 2016).
3. **Facilitated Decision-Making:** Comprehensive information, responsive communication, and transparent processes reduce perceived risk and facilitate participant decisions (Hemsley-Brown & Oplatka, 2006).
4. **Community Building:** Social media platforms enable community formation among former participants, creating word-of-mouth marketing and referrals (Quesenberry, 2020).
5. **Cost-Effective Marketing:** Compared to traditional marketing, digital marketing provides better ROI through targeted reach and measurable results (Chaffey & Ellis-Chadwick, 2019).

5. Discussion

5.1 Integration of Digital Marketing Strategy

The findings indicate that PUSTAMA INDONESIA implements an integrated digital marketing strategy combining multiple platforms and approaches. This integration aligns with Felix et al. (2017), who emphasize that multi-platform digital marketing strategies produce better results than single-platform approaches. The synergy between website, social media, and instant messaging creates a comprehensive digital ecosystem supporting the entire customer journey—from awareness to decision-making and post-purchase engagement.

The institution's official website serves as the foundation of digital presence, providing credibility and comprehensive information (Gregory & Salmon, 2013). Social media functions as engagement and community-building tools (Tuten & Solomon, 2017), while instant messaging facilitates personal communication and trust-building (Ryan & Jones, 2012). This integrated approach addresses the unique challenges of service marketing, particularly intangibility and high perceived risk (Zeithaml et al., 1985; Lovelock & Wirtz, 2011).

5.2 Educational Content as Trust Builder

PUSTAMA INDONESIA's emphasis on educational content marketing rather than aggressive selling represents a strategic approach to building trust and positioning the institution as a thought leader. This finding supports Holliman and Rowley's (2014) research showing that content marketing enhances brand awareness and trust in B2B contexts. In training services, where purchase decisions involve significant time and financial investment, educational content helps reduce information asymmetry and perceived risk (Hemsley-Brown & Oplatka, 2006).

The use of participant testimonials, success stories, and case studies leverages social proof and social cognitive theory (Bandura, 1986). Prospective participants observe the successful experiences of others, which enhances their outcome expectations and self-efficacy regarding training benefits. This aligns with Noe's (2017) assertion that motivation to participate in training is significantly influenced by perceived benefits and success expectations.

5.3 Segmentation and Targeted Messaging

The segmentation strategy implemented by PUSTAMA INDONESIA demonstrates understanding of diverse target audiences with different needs, motivations, and communication preferences. Tailored messaging for each segment—students, job seekers, employees, and institutions—increases marketing effectiveness and relevance (Kotler & Keller, 2016). This approach is consistent with contemporary digital marketing practices emphasizing personalization and targeted communication (Quesenberry, 2020; Wibowo et al., 2024).

The data showing Instagram and YouTube as the most effective channels for students and fresh graduates reflects the demographic preferences of younger audiences who favor visual and video content (Peruta & Shields, 2017). Conversely, the use of LinkedIn and email for corporate and institutional segments recognizes the professional nature of these audiences and their preferred communication channels.

5.4 Digital Marketing and HR Development

From an HR development perspective, digital marketing plays a crucial role in facilitating access to competency-based training and certification. By reducing information barriers and geographic constraints, digital platforms democratize access to professional development opportunities (OECD, 2019; World Economic Forum, 2020). This is particularly important in Indonesia's context, where geographic dispersion and infrastructure challenges can limit access to quality training.

The high certification rates reported (88.8% average) suggest that digital marketing attracts qualified and motivated participants. This may be attributed to the educational content and transparent information that help prospective participants make informed decisions about program suitability (Goldstein & Ford, 2002). Participants who understand program requirements and expected outcomes are more likely to be prepared and committed, leading to higher success rates.

5.5 Sustainability and Scalability

The digital marketing approach adopted by PUSTAMA INDONESIA offers sustainability and scalability advantages. Unlike traditional marketing methods requiring significant ongoing investment, digital platforms provide long-term value through evergreen content, organic reach, and network effects (Chaffey & Ellis-Chadwick, 2019). Content created today continues to attract audiences over time, particularly when optimized for search engines and social media algorithms.

Moreover, digital infrastructure enables rapid scaling as the institution expands its program offerings or geographic reach. The same digital platforms can accommodate increased volume without proportional cost increases, providing economies of scale (Ryan & Jones, 2012). This is particularly relevant for training institutions seeking to expand their impact on national HR development.

5.6 Challenges and Limitations

Despite the positive outcomes, several challenges merit consideration:

1. **Digital Divide:** Not all target segments have equal access to digital technology or literacy, potentially excluding certain populations from benefiting from digital marketing.
2. **Information Overload:** The proliferation of digital content may lead to audience fatigue and reduced attention, requiring continuous content innovation.
3. **Platform Dependency:** Reliance on third-party platforms (social media, search engines) creates vulnerability to algorithm changes and platform policies.
4. **Authenticity Concerns:** Digital marketing faces credibility challenges due to online misinformation and fraudulent claims, requiring institutions to maintain transparency and authenticity.
5. **Resource Requirements:** While cost-effective compared to traditional marketing, effective digital marketing still requires skilled personnel, tools, and consistent effort.

These challenges underscore the need for continuous adaptation, investment in digital capabilities, and maintenance of ethical marketing practices.

6. Conclusion and Recommendations

6.1 Conclusions

This study provides comprehensive insights into digital marketing strategies implemented by competency-based training and certification institutions, using PUSTAMA INDONESIA as a case study. The key conclusions are:

1. **Integrated Digital Marketing Strategy:** PUSTAMA INDONESIA implements an integrated digital marketing strategy combining official website, social media (Instagram, Facebook, YouTube), and instant messaging (WhatsApp Business). This multi-platform approach creates a comprehensive digital ecosystem supporting the entire participant journey from awareness to decision-making and engagement.
2. **Educational Content Approach:** The institution emphasizes educational content marketing over aggressive selling, positioning itself as a thought leader and trusted resource. This approach effectively builds credibility, reduces perceived risk, and facilitates informed decision-making among prospective participants.

3. **Targeted Segmentation:** Marketing messages and content are tailored to four main segments—students, job seekers, employees, and institutions—with platform selection and messaging aligned to each segment's characteristics and preferences. This targeted approach increases marketing effectiveness and relevance.
4. **Contribution to HR Development:** Digital marketing significantly contributes to increasing institutional visibility, strengthening professional image and credibility, and encouraging participant interest and decisions to join training and certification programs. The high certification rates (88.8% average) indicate that digital marketing attracts qualified and motivated participants.
5. **Sustainability and Scalability:** The digital marketing approach offers long-term sustainability through evergreen content and organic reach, with scalability enabling expansion without proportional cost increases. These characteristics make digital marketing a strategic investment for training institutions seeking long-term impact.

6.2 Recommendations

Based on the findings and conclusions, the following recommendations are offered:

For Training and Certification Institutions:

1. **Develop Comprehensive Digital Presence:** Invest in professional website development, active social media management, and responsive communication channels to establish credible digital presence.
2. **Prioritize Educational Content:** Focus on creating high-quality educational content that provides value to audiences beyond promotional messages. Content should address audience pain points, answer questions, and demonstrate expertise.
3. **Implement Data Analytics:** Utilize digital analytics tools to track marketing performance, understand audience behavior, and make data-driven decisions for continuous improvement.
4. **Build Online Communities:** Leverage social media to create communities of current and former participants who can share experiences, provide peer support, and generate word-of-mouth marketing.
5. **Maintain Authenticity and Transparency:** Ensure all marketing claims are accurate, testimonials are genuine, and information is transparent to build and maintain trust.
6. **Invest in Digital Capabilities:** Provide training for staff in digital marketing skills, or hire specialized personnel to ensure effective digital marketing implementation.

For Policymakers and Stakeholders:

1. **Support Digital Infrastructure:** Invest in digital infrastructure and connectivity to reduce the digital divide and ensure equitable access to online training information and opportunities.
2. **Establish Quality Standards:** Develop guidelines and standards for digital marketing practices in education and training sectors to protect consumers and maintain industry credibility.
3. **Facilitate Knowledge Sharing:** Create platforms for training institutions to share best practices, tools, and resources related to digital marketing and HR development.
4. **Monitor Digital Marketing Impact:** Conduct research and evaluation on the impact of digital marketing on training participation, completion rates, and employment outcomes to inform policy decisions.

For Future Research:

1. **Quantitative Impact Studies:** Conduct quantitative research measuring the causal relationship between specific digital marketing activities and training participation, certification rates, and employment outcomes.

2. **Comparative Studies:** Compare digital marketing strategies across multiple institutions, regions, or competency fields to identify success factors and contextual variations.
3. **Participant Perspective Research:** Investigate prospective and current participants' perceptions, experiences, and decision-making processes related to digital marketing in training services.
4. **Long-term Impact Assessment:** Examine the long-term sustainability and scalability of digital marketing strategies in training institutions, including return on investment and organizational capacity development.
5. **Technology Integration Research:** Explore emerging technologies (AI, chatbots, virtual reality) and their potential applications in digital marketing for training and certification services.

6.3 Research Limitations

This study has several limitations that should be considered:

1. **Single Case Study:** As a case study of one institution, findings may not be generalizable to all training and certification institutions. Different contexts, resources, and target markets may yield different results.
2. **Limited Time Frame:** The study captures digital marketing strategies at a specific point in time. Digital marketing is dynamic, and strategies may evolve rapidly.
3. **Self-Reported Data:** Some data were obtained from institutional managers and may be subject to bias or incomplete information.
4. **Lack of Control Group:** Without comparison to institutions not using digital marketing or using different strategies, the specific impact of digital marketing is difficult to isolate from other factors.

Despite these limitations, this study provides valuable insights into digital marketing practices in competency-based training institutions and offers a foundation for future research and practice development.

References

- Armstrong, G., & Kotler, P. (2015). *Marketing: An introduction* (12th ed.). Pearson Education.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Billett, S. (2001). *Learning in the workplace: Strategies for effective practice*. Allen & Unwin.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71.
- BNSP (Badan Nasional Sertifikasi Profesi). (2021). *Pedoman sistem sertifikasi kompetensi kerja nasional*. Jakarta: BNSP.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.

- Cedefop. (2014). *Terminology of European education and training policy* (2nd ed.). Luxembourg: Publications Office of the European Union.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation and practice* (7th ed.). Pearson Education.
- Constantinides, E., & Zinck Stagno, M. C. (2011). Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of Marketing for Higher Education, 21*(1), 7-24.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). McGraw-Hill.
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research, 70*, 118-126.
- Geertz, C. (1973). *The interpretation of cultures*. Basic Books.
- Goldstein, I. L., & Ford, J. K. (2002). *Training in organizations: Needs assessment, development, and evaluation* (4th ed.). Wadsworth.
- Gregory, M., & Salmon, G. (2013). Professional development for online university teaching. *Distance Education, 34*(3), 256-270.
- Hanover Research. (2014). *Trends in higher education marketing, recruitment, and technology*. Hanover Research.
- Hemsley-Brown, J., & Oplatka, I. (2006). Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing. *International Journal of Public Sector Management, 19*(4), 316-338.
- Holliman, G., & Rowley, J. (2014). Business to business digital content marketing: Marketers' perceptions of best practice. *Journal of Research in Interactive Marketing, 8*(4), 269-293.
- ILO (International Labour Organization). (2015). *Skills and employability*. Geneva: ILO.
- Kannan, P. K., & Li, H. (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing, 34*(1), 22-45.
- Kotler, P. (2000). *Marketing management: The millennium edition*. Prentice Hall.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Kvale, S., & Brinkmann, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). SAGE Publications.
- Leeflang, P. S., Verhoef, P. C., Dahlström, P., & Freundt, T. (2014). Challenges and solutions for marketing in a digital era. *European Management Journal, 32*(1), 1-12.

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Lovelock, C., & Wirtz, J. (2011). *Services marketing: People, technology, strategy* (7th ed.). Pearson Education.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Mulyasa, E. (2013). *Pengembangan dan implementasi kurikulum 2013*. Remaja Rosdakarya.
- Noe, R. A. (2017). *Employee training and development* (7th ed.). McGraw-Hill Education.
- OECD. (2019). *OECD skills outlook 2019: Thriving in a digital world*. OECD Publishing.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications.
- Peruta, A., & Shields, A. B. (2017). Social media in higher education: Understanding how colleges and universities use Facebook. *Journal of Marketing for Higher Education*, 27(1), 131-143.
- Quesenberry, K. A. (2020). *Social media strategy: Marketing, advertising, and public relations in the consumer revolution* (3rd ed.). Rowman & Littlefield.
- Rutter, R., Roper, S., & Lettice, F. (2016). Social media interaction, the university brand and recruitment performance. *Journal of Business Research*, 69(8), 3096-3104.
- Ryan, D., & Jones, C. (2012). *Understanding digital marketing: Marketing strategies for engaging the digital generation* (2nd ed.). Kogan Page.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17.
- Stake, R. E. (1995). *The art of case study research*. SAGE Publications.
- Sudira, P. (2016). *TVET abad XXI: Filosofi, teori, konsep, dan strategi pembelajaran vokasional*. UNY Press.
- Tuten, T. L., & Solomon, M. R. (2017). *Social media marketing* (3rd ed.). SAGE Publications.
- Wibowo, A. E., Sudarno, S., & Harjanto, D. (2024). Digital marketing strategies in vocational education institutions: A systematic literature review. *Community Development Journal*, 5(1), 1234-1245. <https://journal.universitaspahlawan.ac.id/index.php/cdj/article/view/47472/29547>
- World Economic Forum. (2020). *The future of jobs report 2020*. Geneva: World Economic Forum.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1985). Problems and strategies in services marketing. *Journal of Marketing*, 49(2), 33-46.

